LOGITECH

FOR IBM PC/AT AND ABOVE
RUNNING WINDOWS 3.0 OR 3.1

FOTOMAN™ PLUS

DIGITAL CAMERA FOR COMPUTERS

LOGITECH

USER'S GUIDE

FotoMan™ Plus
Digital Camera
User's Guide

Logitech Inc.

Logitech, Inc., Fremont, CA 94555
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Preface

The *FotoMan™ Plus User's Guide* describes how the FotoMan Plus Digital Camera works. It explains how to take the best photos, how to enhance your photos, how to get the best printed results, and how to keep your camera in top condition.

It also tells you how to use Logitech's FotoMan software to preview photos and choose the ones you want to keep. And you learn to save pictures from the camera to graphics files on your personal computer.

We hope you find your FotoMan Plus Digital Camera useful and exciting. We wish you many happy hours of using it.

Included with your FotoMan Plus camera is Logitech's FotoTouch™ Image Editing software. For complete details on how to use FotoTouch to improve the look of your photos, refer to the *FotoTouch User's Guide.*

To learn how to connect the camera to your computer and how to install the software you use with the camera, see the *Installation Guide* in your FotoMan Plus package.

For the details on operating DOS and Windows, refer to your DOS manual and the *Microsoft® Windows™ User's Guide.*

What's in This User's Guide

Chapter 1, Introduction. Tells about your FotoMan Plus Digital Camera.

Chapter 2, Using the FotoMan Plus Digital Camera. Explains how to take pictures with your FotoMan Plus camera and how to make sure the camera's batteries are charged and the camera is ready to go. Also explains what the camera's sound signals mean.

Chapter 3, Using FotoMan Software. Explains how to launch FotoMan software on your computer, and how to transfer pictures from the camera to your computer, using the features of FotoMan software.

Chapter 4, Imaging Tips. Gives you important tips on how to make the best use of your FotoMan Plus camera.

Chapter 5, Saving Photos Quickly With FotoSave. Tells you how to save many photos at one time quickly by using the DOS utility FotoSave.

Appendix A, System Requirements & Specifications. Lists what your system needs to work with the FotoMan Plus camera, and the technical specifications of the camera.

Appendix B, Product Support Plan. Explains Logitech's technical support and customer services and how to contact them.

Appendix C, Troubleshooting. Discusses problems that you may encounter when you use the FotoMan Plus camera. Lists error messages that you may see on your screen, and explains what they mean and what to do about them.

Appendix D, WIN.INI Entries. Lists and explains sections added to your Windows WIN.INI file during installation.

1

Introduction

Welcome to the fascinating world of digital photography.

With the FotoMan Plus Digital Camera, you can take up to 32 photographs in one camera load, then transfer them through a serial cable to your personal computer. There's no film and no waiting to develop film. Using FotoMan software in the Windows™ 3.0 or 3.1 environment, you can see your photos on your monitor screen when you choose, and save them as grayscale files in a full range of 256 gray shades, or as line-art files, in one of six possible file formats.

Take your FotoMan Plus camera with you anywhere you would take a camera that uses film. One caution only—as long as you have photos in your FotoMan Plus camera, keep the rechargeable NiCad batteries well charged, or there's a possibility that you could lose your photos before you transfer them to your computer. See Chapter 2 about this.

Once you save FotoMan photos, they're just like other graphics files. You can put them into newsletters, fliers, electronic databases, catalogs, or other documents produced with word processing or desktop publishing applications. Once you've saved your photos as computer files, you can also transmit them in faxes or by other electronic means.

Use FotoTouch software to print FotoMan photos with your computer's printer, the same way you'd print any other computer graphics. You can do this immediately if you want to see a particular photo. Or you can wait until you finish your photo session.

If your printer doesn't reproduce the quality of the FotoMan images you see on your monitor, you can print FotoMan photos on other, higher resolution printers. The higher the resolution of the printer you use, the better your FotoMan photos will look.

It's easy to edit digital photos—to change them to your liking—using Logitech's FotoTouch Image Editing Software (installed with the camera software). And you can use FotoMan with other TWAIN-compliant applications. TWAIN is an application programming interface standard that ensures a simple and consistent way to bring images into an application.

The FotoMan Plus Digital Camera is an ingenious and useful tool that greatly expands the capabilities of everyone who makes computer graphics and does electronic publishing.

2

Using the FotoMan Plus Digital Camera

This chapter introduces you to the FotoMan Plus Digital Camera. And it provides you with the basics for taking good photos.

Before using the FotoMan Plus camera, read this chapter to understand:

- The parts of the camera and how to use them.
- How to charge the camera batteries.
- How to take photos with the camera.
- The camera sound signals.
- Some technical details about the ways the digital camera resembles a film camera.
- What accessories you received with the FotoMan Plus camera, and how to use them.

Attention upgraders: Information in this chapter is specific to the FotoMan Plus camera. If you own a previous version of the FotoMan camera and you are adding new FotoMan and FotoWare software, skip this chapter and go directly to the software information in Chapter 3.

The FotoMan Plus Camera and Its Parts

This section describes the FotoMan Plus camera parts, base and stand. Figure 2-1 defines the parts of the camera and its base.

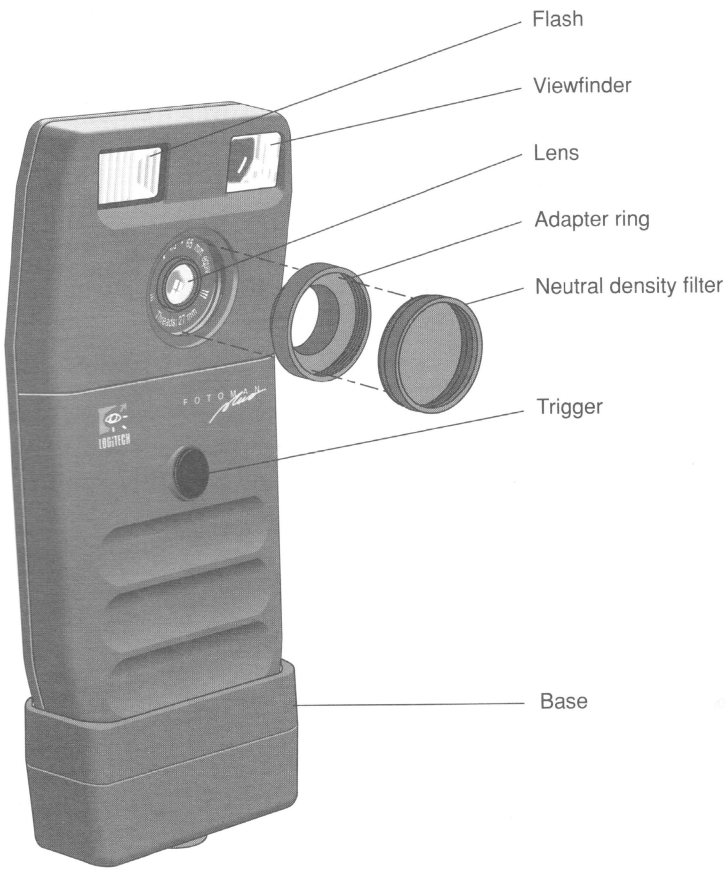


Figure 2-1. The FotoMan Plus Camera and Its Parts

Flash

The flash fires automatically whenever you press the trigger in diminished light. It doesn't fire in bright daylight. If the camera senses that the surrounding light is dim, the flash fires when you take a photo. This can happen outdoors on a dark day.

For shooting indoors, where you use the flash most, try to stay between three and eight feet (1 to 2.5 meters) away from your subject. Anything farther away than eight feet tends to have a background darkness. Avoid any light you see shining into the frame you're about to photograph—this will darken figures in your photos. If your photos are too dark, or overexposed, that is, all white, consult the sections "Making Dark Photos Lighter" and "Overexposed Photos" in Chapter 4.

The flash may become unreliable in weather that is very hot and humid, over 104° Fahrenheit (40° Centigrade) at over 85% relative humidity. Without the flash, the camera operates reliably at up to 90% relative humidity.

For more information on the flash, See "Using the Flash" on page 13.

Viewfinder

When you look through the viewfinder, you see two transparent shapes, a rectangle and a set of brackets, superimposed on your field of vision. The see-through shapes make up the reticle. Figure 2-2 illustrates this. The rectangle surrounds the part of what you see that appears in your photo if you use the unaided lens of the FotoMan Plus camera.

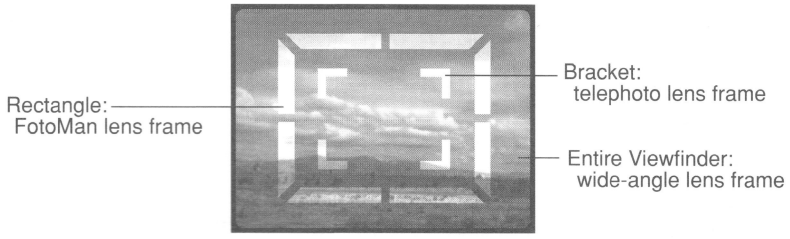


Figure 2-2. Viewfinder Visual Field and Reticle

Within the rectangle are four brackets defining a smaller area. What's in this small area shows up on a photo taken with a 1.5X telephoto conversion lens fitted into the camera's adapter ring. If you attach a 0.65X wide-angle lens instead, the camera will photograph a larger area, everything you see in the viewfinder, inside and outside the rectangle. Telephoto and wide-angle lenses are not supplied with the FotoMan Plus camera.

Lens

The FotoMan Plus Digital Camera has a fixed-focus lens. Your photos are clearly focused if you stay at least three feet (one meter) away from whatever you photograph. The FotoMan Plus camera has a "standard" or "normal" lens that is the equivalent of a 65mm (millimeter) focal-length lens in a 35 mm format.

You can attach wide-angle or telephoto lenses to the FotoMan Plus camera, if they fit the recess around the lens, or the adapter ring provided. See the next section for details.

Neutral Density Filter and Adapter Ring

The neutral density filter reduces the glare of bright reflections on bright days with full sunlight or a few clouds. This filter reduces light evenly across the spectrum (optical density 0.9, the same as $^{1}/_{8}$ transmission). Don't use the filter indoors or on dark, cloudy days.

The recess around the camera lens is 27 mm wide and threaded inside. This fits the small end of the adapter ring supplied with the FotoMan Plus camera. The neutral density filter fits into the large, 37 mm end. Other filters and camcorder lens attachments are available commercially in the 27 mm and 37 mm size. Add-on lenses should include enough threaded space to allow the neutral density filter to be used for outdoor photography.

Be careful not to cross-thread the adapter ring and filter. Keep the threads clean and they will always fit exactly and twist easily into place.

Trigger

To take a photo, press this button until you feel a click, then hold the button down (and the camera steady) for one second before you release. Several seconds after you release the trigger, the camera sounds one long high tone. That means it's ready to take the next photo.

Base

The base contains the electrical contacts that make communication possible between the camera and your computer.

To attach the base to the camera, turn it until it fits onto the bottom end of the camera. Hold the base and camera together and twist the flat knob in the base clockwise to secure them.

You can take photos with or without the base attached. However, be sure to screw the base firmly to the camera whenever you attach the camera cable to communicate between camera and computer.

Camera Stand

You can use the FotoMan camera stand to hold the camera while you charge the batteries and transfer photos. The stand also holds the camera steady while you take a timed photo.

The camera stand comes in two pieces. To assemble it, slide the stand support plate into the bottom hole of the stand. Press until the two parts snap together.

Slide the camera and attached base into the stand. Keep the base attached to the camera while they are in the stand. Attach the cables to the base through the back of the stand.

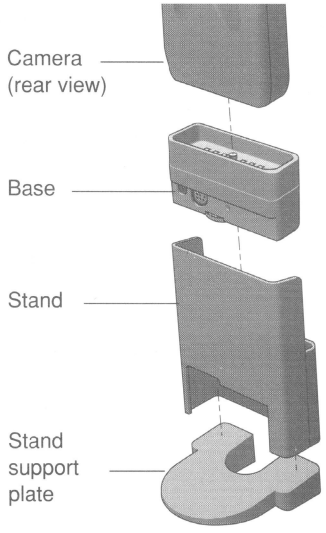


Figure 2-3. Camera Stand

Charging the Camera Batteries

The two rechargeable NiCad (nickel-cadmium) batteries in the FotoMan Plus camera have to be charged at least 30 minutes before you can take the first photo, and should be fully charged when you take the camera out for a whole day. Normally, you need six hours to charge empty or nearly empty NiCad batteries fully.

If you haven't yet charged the batteries more than an hour, or if the camera has been disconnected from the battery charger for several hours, follow these instructions now:

1. **Attach the base to the camera, if it isn't already attached.**
2. **Plug the battery charger into an electrical outlet and connect it to the camera base.** The red light in the base will come on. Don't be alarmed if there is a delay of up to four minutes before the red light comes on. This can happen under certain conditions.
3. **Let the batteries charge until the red light in the base starts blinking.** A full charge takes about six hours.

Keep the charger attached to the camera as long as you can, especially when you also attach the camera cable. The batteries in the camera begin losing power the minute you disconnect the charger and, if the camera remains attached to the computer while the charger is disconnected, the batteries lose charge much faster.

You could plug in the battery charger at night to be sure the batteries are fully charged the next morning. Or you could just leave the camera attached to the charger when not in use. It doesn't harm the batteries.

Protecting Photos in the Camera

It's best to keep the camera batteries charged, to prevent losing your photos before you can save them to your computer from the camera.

CAUTION **When the camera batteries go completely dead, you lose all the photos stored inside the camera.**

Start charging the batteries when:

- You're using the camera for the first time.
- You hear no tone from the camera after you press the trigger.
- The battery charge icon in the FotoMan window shows less than 20% charged.
- The camera sounds one long low tone. This warns you that you cannot take more photos, and that you must get the camera back on the charger and transfer your photos to the computer, or lose them. See "Signals You Hear Immediately after Pressing the Trigger" on page 16.

If you do a lot of work with the camera away from your desk, remember these rules of thumb about how quickly the NiCad batteries lose charge:

- The batteries lose about 20 percent of a full charge each time you take a full load of photos (32 photos).
- The batteries lose about 15 percent of a full charge each time you go 24 hours without recharging.

Note If the batteries run down completely, you lose the photos in the camera. However, this doesn't hurt the batteries. In fact, it's good for NiCad batteries to let them run down completely from time to time. This also improves the accuracy of the battery charge icon in the FotoMan window.

Keeping the Batteries Charged

The NiCad batteries in the camera are fully charged:

- After charging for six hours.
- When, with the charger attached to the camera base, the red light in the base stops glowing steadily and starts flashing.
- When the battery charge icon in the FotoMan window reads 100%.

If you use the camera often while you're away from a household electrical outlet for more than a few hours, it's advisable to get a battery charger cable (not supplied with FotoMan) that plugs into your car's cigarette lighter to recharge the camera batteries. Your car must have a 12-volt battery, as most cars have.

If you connect the camera to a battery charger that isn't the one you got with FotoMan, make sure that the output is 12 volts, direct current (DC), and the positive pole is in the center. Look for the symbol in Figure 2-3.

Figure 2-4. FotoMan Charger Polarity: Positive Pole in the Center

The batteries and camera are protected against reversing the polarity. If you use a charger with a negative center pole (with + and - reversed in Figure 2-3), the batteries don't charge and the camera doesn't react.

Note When you charge the NiCad batteries six hours and the power goes down after less use or after a shorter time than usual, it could be a sign that the batteries are wearing out. Refer to "When the NiCad Batteries Start to Wear Out" on page 18.

How to Take a Photo With the Camera

The flash and shutter speed are automatic, the focus and f-stop are fixed. Hold the FotoMan Plus camera the same way in either your right or left hand. Take the camera in your hand with your thumb in the slanting guide on the back and your fingers in the horizontal slots on the front. Your index finger rests over or near the trigger.

You can take photos holding the FotoMan Plus camera upright, or turn it sideways to photograph an image that is tall and narrow.

Use the following procedure to take a photo, indoors or outdoors:

1. **Check the lighting.** The main light source should be behind you. Any light shining in the frame will darken the figures in your photo.

2. **Look for bright reflections.** If you're outdoors in strong light and there are spots of intense glare in the area you want to photograph, attach the neutral density filter. Don't use the filter indoors, at twilight, or on dark, overcast days.
3. **Check the distance.** Make sure your subject is at least three feet (one meter) away.
4. **Line up the image in the viewfinder.** Move the camera until the inner edge of the rectangle in the viewfinder surrounds the image you want in your photo (applies to the standard lens).
5. **Press the trigger until you hear (and feel) a click.** Hold the trigger down for about one second, until after the click, and then release.
6. **Wait for the tone.** Wait several seconds, until you hear a long, high tone. This indicates that the camera is ready to take the next photo.

You don't have to advance the camera. It gets ready to take the next photo automatically.

Caution If you use the camera and its base on a tripod, be careful not to screw the head of the tripod too tightly into the base. Over-tightening the flat knob on the bottom of the camera base may make the camera and base very hard to separate.

Subject Distance and Image Sharpness

You don't need to focus FotoMan's standard lens. Subjects, both near and far, are always in proper focus if you don't get too close. Table 2-1 shows just how close and how far an object can be and still appear sharp in your pictures. Optional conversion lens attachments are also listed. (You use these lens attachments in combination with FotoMan's standard lens.) If you want the sharpest possible picture, place the camera at the table's optimum object distance. For the standard lens, the camera would be 6.6 feet away.

Table 2-1: Range of Focus for Standard, Wide, and Telephoto Lenses

Lens Type	Nearest Object Distance	Farthest Object Distance	Optimum Object Distance	Diagonal Angle of View
Standard (1X)	3 ft	Infinity	7 ft	37. 5°
Wide-angle (.65X)	1.5 ft	Infinity	3 ft	55°
Telephoto (1.5X)	7.5 ft	Infinity	15 ft	25.5°

Table 2-1 also shows what each lens "sees" or covers in a given scene. This coverage is referred to as angle of view, and is expressed in degrees. Typically, angle of view is measured diagonally across the scene so as to include the effect of both scene height and width.

As you can see from Table 2-1, the wide-angle conversion lens attached to the camera provides the greatest angle of view, followed by the standard and telephoto conversion lenses.

Note You can obtain wide-angle and telephoto lenses, and filters and other accessories, for the FotoMan Plus camera. For information call the 800 number on the last page of this *User's Guide*.

Close-up Photography

FotoMan can take close-up pictures, using optional close-up lens attachments. These lens attachments act like magnifying glasses of varying powers, and are measured in diopters. They change the focusing distance of the lens while adding their own magnifying effect. When you halve the distance to your subject, your subject doubles in size. This relationship holds for the conversion lenses as well.

Table 2-2 shows the nearest, farthest, and optimum focusing distances of FotoMan's standard lens, and optional conversion lenses with a 1+, 2+, and 4+ diopter close-up lens attachment.

Table 2-2: Range of Focus with Close-up Lens Attachments

Lens Type	Nearest Distance	Farthest Distance	Optimum Distance
Standard (1+Diopter)	20 inches	40 inches	26 inches
Standard (2+Diopter)	13 inches	20 inches	16 inches
Standard (4+Diopter)	8 inches	10 inches	9 inches
Wide-angle (1+Diopter)	12 inches	40 inches	18 inches
Wide-angle (2+Diopter)	9 inches	17 inches	12 inches
Wide-angle (4+Diopter)	6 inches	10 inches	8 inches
Telephoto (1+Diopter)	27 inches	40 inches	32 inches
Telephoto (2+Diopter)	16 inches	20 inches	18 inches
Telephoto (4+Diopter)	9 inches	10 inches	9 inches

Note With a viewfinder camera like FotoMan, the viewfinder is in a different position than the lens taking the picture. When the subject is very close, the viewfinder doesn't see exactly what the lens sees. This difference in position causes parallax error when you place the camera closer than one meter from the subject.

For close-up pictures, you have to compensate for parallax error. Try pointing the camera up and to the left in relationship to your subject. The subject in the viewfinder will move down and to the right. You will need to experiment for best results.

Using the Flash

The flash fires automatically any time the light is too dim for an acceptable photo. Like any camera, subject distance and the amount of light reflected by your subject determine whether your flash picture will be properly exposed.

Subject Distance

To help you take flash pictures, Table 2-3 shows nearest, farthest, and optimum distances for the standard lens and optional lens attachments.

Table 2-3: Usable Flash Distances

Lens Type	Nearest Flash Distance	Farthest Flash Distance	Optimum Flash Distance
Standard	3 ft	8 ft	4 - 5 ft
Wide-angle	1.5 ft	12 ft	4 - 9 ft
Telephoto	—	—	—

The minimum flash range in Table 2-3 is determined by the minimum focusing distance of the lens. (Lens in this context refers to the standard lens or the standard lens used with a conversion lens attachment.) The maximum distance is determined by the power of the flash, the camera's sensor, and the light-gathering ability of the lens.

The figures shown are guidelines only. The amount of light reflected by your subject does affect the ultimate quality of your pictures. Place subjects that reflect more light, such as a person wearing a white shirt, more to the end of the specified range. Place darker objects closer.

If you're using the telephoto conversion lens attachment (non-close-up pictures) and the flash fires, the resulting image will most likely be too dark. The light-gathering power of that lens and the intensity of the flash account for the underexposure. If you use the telephoto conversion lens indoors, try shooting in strong surrounding light or use additional lamps.

Note You can take excellent flash pictures with close-up lens attachments. See "Close-up Photography" on 12. The flash gives ample illumination regardless of which close-up lens you use with either the standard lens or one of the conversion lenses.

For subjects that reflect more light, you may need to minimize overexposure by reducing the amount of flash. Try placing a handkerchief over the flash, or experiment for the best results.

Adjusting Light Levels

If your flash exposure is too light or too dark, and you can't move the camera or your subject, then you must adjust the light level.

For underexposures, try turning up the room lights, or use lamps or strobes. With lamps, use a hand-held reflective or incident light meter to adjust your light level. With strobes, use a flash meter. In either case, set the aperture dial on your meter to f 4.5 and ASA to 200. Adjust the light level of the lamps, or fire the strobes, until you obtain a shutter speed reading between $^{1}/60$ to $^{1}/250$ of a second.

Remember that if you hear the camera beep twice after you press the trigger, the image may be too dark. You will need to move closer or turn up the lights before taking another photo. See the next section, "Camera Sound Signals," for a complete explanation of tones the camera emits.

For overexposures, try using the neutral density filter. The filter reduces the amount of light recorded by the camera's sensor. Or, place a handkerchief over the camera's flash to reduce it's output. With either method, you will need to experiment for the best results.

Camera Sound Signals

The FotoMan Plus camera makes characteristic tones to tell you what is happening inside it. These signals are low or high, short or long.

Signals You Hear Several Seconds after Pressing the Trigger

- ***1 long high tone:***
  The camera is ready to take the next photo.
- ***2 long high tones:***
  The photo you just took is too dark.
  To try again with the same subject, move closer.
- ***6 short tones, high, low, high, low, high, low:***
  Room in the camera for 6 more photos.
- ***5 short tones, high, low, high, low, high:***
  Room for 5 more photos.
- ***4 short tones, high, low, high, low:***
  Room for 4 more photos.

- ***3 short tones, high, low, high:***
  Room for 3 more photos.
- ***2 short tones, high, low:***
  Room for 2 more photos.
- ***1 short high tone:***
  Room for 1 more photo.

Signals You Hear Immediately after Pressing the Trigger

These signals tell you what you must do before you can take another photo.

- ***2 long high tones:***
  The camera is full. You must save your photos.
- ***1 long low tone:***
  Recharge the batteries at once.
- ***3 long low tones:***
  Reinstall FotoWare software in the camera.
  To do this, you must connect the camera to your computer and launch FotoMan or the FotoSave DOS utility.

The FotoMan Plus camera contains its own control software, called FotoWare (refer to "FotoWare Software" in Appendix A for details). Under rare conditions, FotoWare may need reinstalling. The next time you launch FotoMan, it will detect any flaw in FotoWare and ask your permission to reinstall. You can also use the FotoSave DOS utility to reinstall FotoWare. Refer to "Download FotoWare Software to the Camera" in Chapter 5.

Traveling with the FotoMan Plus Camera

If you take the FotoMan Plus camera with you on a trip, even if you're only gone from your desk part of a day, keep these things in mind:

- The FotoMan camera carrying case (see Figure 2-5) is the handiest and safest way to take the camera along wherever you go. It's the best protection against damaging your camera while you carry it. Keep the step ring attached to protect the lens.

Figure 2-5. FotoMan Camera Carrying Case

- Remember—if the batteries go dead before you transfer the photos in the camera to the computer, you lose them all. The level of charge in the batteries puts a limit on what you can attempt. So it's best to plan ahead. Every full load of 32 photos you take uses about 20% of a full battery charge, every 24 hours you go without recharging uses about 15%
- Conserve battery charge when you can. Be aware of which actions drain the batteries quickly. For instance, always connect the charger cable when you attach the camera to the computer, and remember that taking photos with the flash uses more energy.
- Transfer photos in the camera to disk as soon as possible. If you use a portable computer for this purpose, make sure it has at least one free serial port (COM port). Consult Help in the FotoMan window to learn how to use the keyboard with FotoMan software.
- Take the battery charger along and recharge the camera batteries whenever you can. If you travel by car, you might add a car cigarette-lighter charger cable to your camera accessories, and keep the camera plugged in. This cable is not supplied with FotoMan.

Taking Good Care of Your FotoMan Plus Camera

Here are a few simple, common-sense rules that should keep your FotoMan Plus camera operating smoothly:

- Keep the lens and neutral density filter clean. Avoid touching them and clean them (only if necessary) with lens-cleaning equipment that you can get in a camera store.
- When not taking photos, keep the lens cap on the camera. The lens cap fits over the large end of the adapter ring, or over the neutral density filter.
- Keep the contacts between camera and base clean. If the contacts get dirty or look discolored, rub them with a pencil eraser.
- Avoid leaving the camera lying in the sun. Avoid taking photos with the camera pointed into the sun. This could damage your camera.
- Keep the camera from getting wet. Keep the inside of the camera from getting damp in any way.

When the NiCad Batteries Start to Wear Out

Under normal use, the NiCad batteries in your camera last about two years. You know they are wearing out when you charge them six hours and they do less and less work before you need to recharge.

To find out how to replace your camera's NiCad batteries, call Logitech Technical Support at this number in the United States and Canada: (510) 795-8100. For other numbers, refer to Appendix B.

CAUTION **A 300-volt electrical charge is stored in your camera. Do not remove the back plate and do not force anything inside the camera.**

ATTENTION **Une charge électrique de 300 volts est stockée dans votre appareil. Ne retirez pas la plaque arrière et n'enfoncez aucun objet à l'intérieur.**

3

Using FotoMan Software

Whenever you take photos, you want to see the results as soon as possible and pick the photos you'll keep. You also want to put them in order for future reference, especially if they're intended for business use.

You can do all this and much more, quickly and conveniently, with the aid of FotoMan software.

FotoMan software is an interface. That means that it connects the FotoMan Plus camera and photos to your computer and the FotoTouch Image Editing Software you received with FotoMan.

This chapter shows how you transfer photos from the camera to your personal computer. When you finish this chapter, you will know how to launch FotoMan software, and you will know how to use the FotoMan window to

- view previews of the photos you've taken
- record information about each photo as part of its file
- set the COM port number and the baud rate that the camera uses to communicate with your computer
- select and save the photos you want, in the file format you prefer, to your computer's hard disk or to one or more floppy disks
- check, on the FotoMan window, how many photos you've taken and how much charge is left in the camera batteries
- take a timed photo
- clear the camera of photos so you can take more
- replace the FotoWare™ software in the camera
- get on-screen help if you're uncertain about how some part of FotoMan software works
- exit the FotoMan window

Launching FotoMan Software

Before you can use FotoMan software on the photos in your FotoMan camera, you must have the software installed, and you must launch it. FotoMan software may be launched three ways

1. from within a TWAIN-compliant application such as FotoTouch Image Editing Software
2. directly from Windows Program Manager
3. from the DOS command line

If you haven't yet installed FotoMan software, do it now.

Launching FotoMan from FotoTouch

FotoMan software is a TWAIN-compliant image source. Therefore, you can load it from within a TWAIN-compliant application, such as FotoTouch software. The TWAIN API (application program interface) ensures an easy and consistent link between the camera and your applications.

When you install FotoMan, you also install FotoTouch, which you can use to edit, save and print photos. To transfer photos from FotoMan to FotoTouch for editing, always launch FotoTouch first.

To launch FotoTouch software, double-click its icon (shown here) in Windows Program Manager. The FotoTouch application window appears.

To acquire FotoMan from FotoTouch the first time, use the following procedure:

1. **Choose the Select Source command from the FotoTouch File menu.** This displays the Select Source dialog box. See Figure 3-1.
2. **In the Sources list box, select Logitech FotoMan.** The source you select appears reverse highlighted.
3. **Click the Select button.** Now you can launch FotoMan.

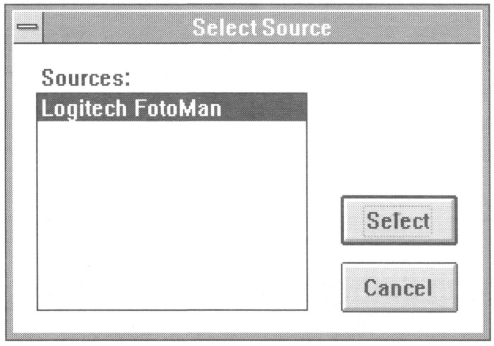


Figure 3-1. FotoTouch Select Source Dialog Box

4. **Open the FotoTouch File menu.**
5. **Choose Acquire.** The FotoMan window appears.

To load FotoMan from FotoTouch from now on, you only have to choose Acquire in the FotoTouch File menu. However, if you add another image source, such as a scanner, and select it in the FotoTouch Select Source dialog box, then you have to re-select FotoMan to load it from FotoTouch (instead of the scanner or other image source).

Launching FotoMan Directly from Windows

You can launch FotoMan as a stand-alone application from Windows. Double-click the FotoMan icon (shown here) from Windows Program Manager.

Launching FotoMan from the DOS Prompt

You must launch Windows when you launch FotoMan. So the launch command must begin with WIN. Go to the directory which includes your FOTOMAN.EXE file. From the DOS prompt, type the following command and press the Enter key:

WIN FOTOMAN

What FotoMan Software Does When It Launches

When you launch FotoMan software, it does the following things automatically:

- FotoMan determines whether the camera is connected to your computer.

  If the camera isn't connected, this message appears in the message line at the bottom of your FotoMan window:

  Plug in the camera and wait for reconnection...

  Connect the camera cable and click the Connect Camera button under the connector icon in the FotoMan window. FotoMan will establish contact between camera and computer.

- FotoMan tests whether the FotoWare software in the camera is in working order. If FotoWare doesn't pass any part of this test, FotoMan asks your permission to reinstall FotoWare software in the camera. FotoMan sets the camera's baud rate. This is the speed at which the camera communicates with your computer. You can use the Options dialog box to set the baud rate manually, if you want. See "Choosing Serial Port and Baud Rate" on page 27.

- FotoMan transfers small previews of your photos and information about the photos from the camera to your computer. The time your computer takes to complete the display depends on the baud rate and the number of photos in the camera. The previews appear a little differently on different monitors, but your FotoMan window should resemble Figure 3-2.

Using the FotoMan Window

Use the buttons, commands, icons and other features of the FotoMan window to perform important software tasks that complete your photos and control the camera. The rest of Chapter 3 shows you how to do this.

Figure 3-2 shows the parts of the FotoMan window.

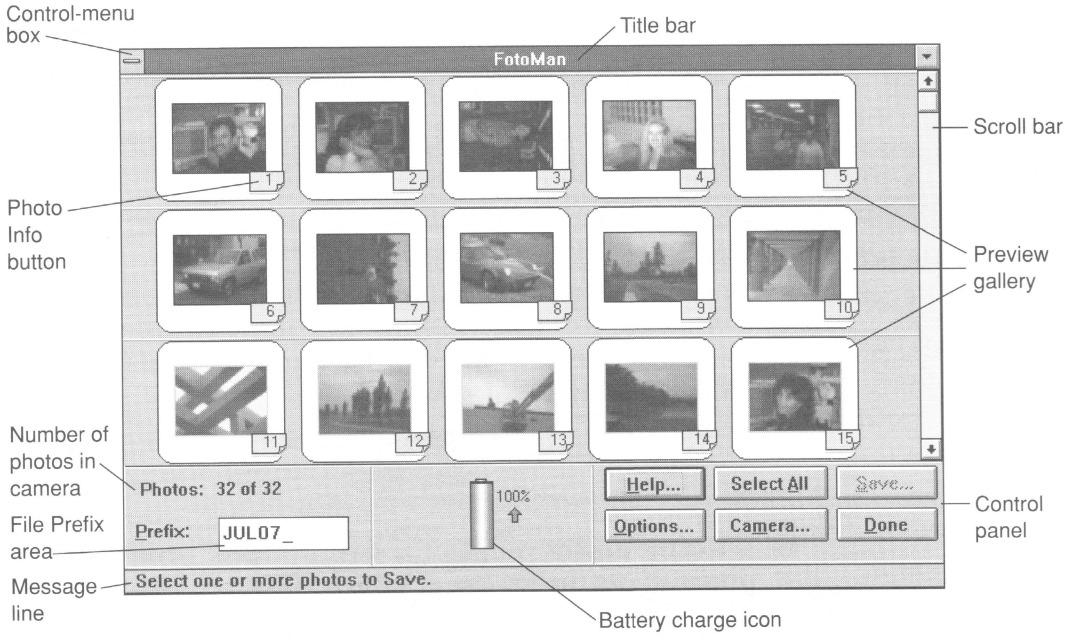


Figure 3-2. The FotoMan Window

Previewing and Selecting Photos

Most of the space in the FotoMan window (see Figure 3-2) is reserved for previews of your photos, numbered in the order you took them. To see the previews of photos you have taken, and to save the photos you pick, use the following procedure:

1. **Connect the camera to your computer.**

2. **Launch FotoMan.** This displays the FotoMan window, with previews of all the photos currently in the camera.

3. **Look at all the previews.** If you have more previews to look at than can be displayed on your monitor screen at one time, use the scrollbar on the right to move around in the preview gallery.

   Click the up or down arrow on the scrollbar once to move one row at a time. You can use the Page Up or Page Down keys on your keyboard for the same purpose.

   If you acquired FotoMan after first launching FotoTouch, you can see the full-size photo that corresponds to any preview in the gallery. Simply double-click inside the preview. To return to the FotoMan window, click Acquire in the FotoTouch File menu.

4a. **Select the photos you want to save, using the mouse (if you prefer to use the keyboard, refer to section 4b).**

   To select each photo for saving, move the mouse cursor inside the preview and click (once only). When you select a photo, the white area around the preview is darkened. To deselect the photo, click the preview again.

   To select all the photos in the camera, click the Select All button in the control panel. This button toggles between Select All and Deselect All.

4b. **Select the photos you want to save, using the keyboard (if you prefer to use the mouse, refer to section 4a).**

   To select the photos you want FotoMan to save and make into graphics files, use the Tab key to toggle between the preview gallery and the control panel (see Figure 3-2). When keyboard focus

is on a button, the button is surrounded by a black line. When focus is on a preview, the preview is inside a dotted line. Use the arrow keys to move the focus from preview to preview in the gallery.

To select one photo for saving, move the focus to the preview and press the Space Bar. When you select a photo, the white area around the preview is darkened. To deselect the preview, put focus on the preview and press the Space Bar again. To select all the photos in the camera, place the focus on the Select All button in the control panel, then press the Space Bar. This button toggles between Select All and Deselect All.

For a detailed explanation of how to use FotoMan software with the keyboard, put the focus on Help and press the Space Bar. When the Help screen appears, choose Keyboard Commands.

Labeling Photos

To call up a list of the information that is in a photo's file, click the numbered button beneath the photo's preview, or click the preview with the right mouse button. The Photo Info dialog box appears.

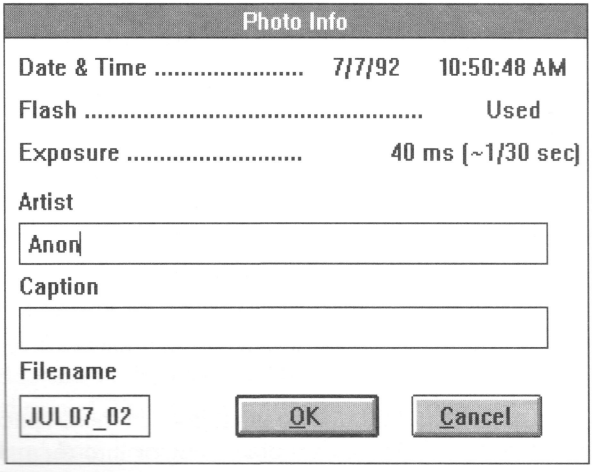


Figure 3-3. Photo Info Dialog Box

Automatically Recorded Photo Information

When you take a photo, the camera automatically notes *Date & Time* the picture was taken. The camera synchronizes this with the date and time in your computer. So if you want your photos accurately dated, keep your computer time accurate. The camera also records *Flash* (that is, whether the flash was Used or Not Used), and *Exposure* (length of exposure time in milliseconds and in fractions of a second).

Filename

Filename, at the bottom of the Photo Info dialog box, is a standard DOS filename, up to eight characters long, for the photo's file. The default filename, which you accept if you make no changes, is the month and day of the month, an underscore, then the numbers 01 to 32 in a camera full of photos.

When you change *Filename*, you change the name of one file only. To change the default filename of all photos in the camera, use the area labeled *Prefix* in the control panel of the FotoMan window (see Figure 3-2). You change the prefix, from one to six characters long, in the default filename. FotoMan always adds the two characters of the photo number to make a filename that's no more than eight characters long.

To change the default filename (for all photos), first close the Photo Info dialog box. Then click the mouse cursor in the Prefix area of the FotoMan window, delete the default prefix, and type what you want in its place.

Artist and Caption

This information is kept only if you save the photo it goes with in the TIFF file format (not in BMP, PCX, EPS or JPEG format). And you can only display the information in software which supports the *Artist* and *Caption* fields, as FotoMan does. For details, see "Saving the Artist and Caption Fields" in Appendix A.

You decide what goes in these spaces (you can just leave them empty). Move the mouse cursor into them, click, and type what you choose. There is room for more information than in the *Filename* area.

In Photo Info, you name *Artist* and *Caption* for a single photo. To set the default value of *Artist* and *Caption,* that is, the value for all photos, click the Options button in the control panel of the FotoMan window. The Options dialog box appears (see Figure 3-4).

Artist and *Caption* are in the upper area of the Options dialog box, under File Settings. Click the mouse cursor in the *Artist* or *Caption* field, then type the information you want for all the photos in the camera.

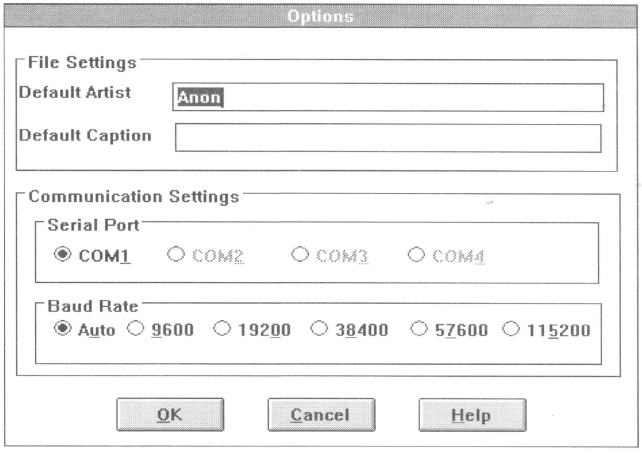


Figure 3-4. Options Dialog Box

Choosing Serial Port and Baud Rate

You can use the Communication Settings area of the Options dialog box (see Figure 3-4) to choose the serial port, that is, where you connect the camera to your computer, and to set the baud rate, that is, how fast the camera communicates with your computer.

Use the Serial Port area to choose the COM port. Click the port number you want and then click the OK button. Make sure the camera cable is connected to the COM port you choose, at the back of the computer. Ports are dimmed if your system doesn't have them.

Use the Baud Rate area to change the rate of communication between the camera and computer. If you click Auto, FotoMan analyzes your system and sets an optimum baud rate. To find your baud rate setting,

open the control-menu box in the upper left corner of the FotoMan window and click the About command.

Saving Photos

To save photos you've selected in the FotoMan window, use the Save Photos dialog box. You have to select the photos first. Click the Save button in the control panel of the FotoMan window to make the Save Photos dialog box appear.

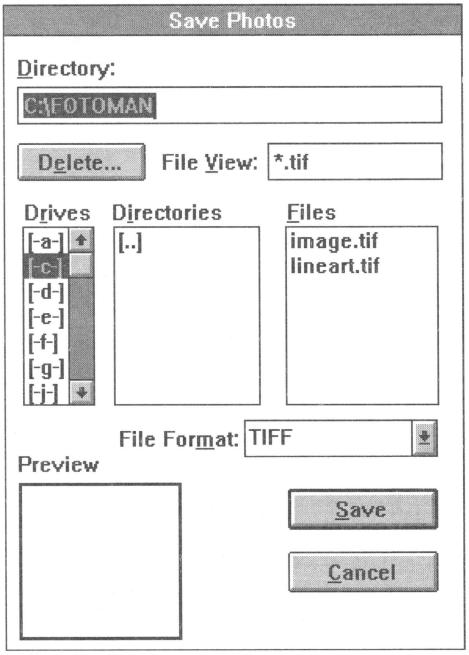


Figure 3-5. Save Photos Dialog Box

File Format

Every photo must be saved in a specific file format. FotoMan saves photos in the format you chose most recently, until you change it. Click the arrow to the right of the File format box, and a menu with format choices drops down for you to choose from. FotoMan Plus saves in the .JPG, .TIF, .BMP and .PCX file formats

Saving

To save the photos you've selected in the FotoMan window, simply click the Save button in the Save Photos dialog box (see Figure 3-5). After you save a photo, it is no longer selected, and loses its dark frame.

To specify the directory where you want to store the photo files you save, double-click the drive and directory you choose in the areas titled Drives and Directories (see Figure 3-5). Your choice appears as a path in the Directory area at the top.

You can also create a new directory from the Directory text field of the Save Photos dialog box (see Figure 3-5). If you type a directory name that doesn't exist in the current drive, a Create Directory dialog box appears. If you want to create a new directory, click the Create button.

When you save one photo, a progress dialog box appears with one Abort button. To stop saving, press this button before the save ends.

When you save two or more photos together, a progress dialog box appears with an Abort Current and an Abort All button. Press Abort All to stop saving all remaining photos. Press Abort Current to stop saving the current photo only. If you do this, a dialog box appears with two buttons, Yes and No. Press No to go on saving the other photos you've selected. Press Yes to stop saving altogether.

When You Run Out of Space

When you run out of space while saving to floppy disks, the Save Photos dialog box appears. To continue saving, put in another formatted floppy disk (or choose a different drive) and click OK.

When you run out of space while saving on your hard drive, a message appears, informing you of the problem. Click OK. This returns you to the Save Photos dialog box, where the files you have not yet saved will still be in the FotoMan window. Select a new destination, or delete old files to make room, then click the Save button again.

Conserve Disk Space as You Save Photos

Photo files tend to be large. The JPEG compressed file format gives you a way to reduce file size dramatically. JPEG can result in space savings of up to 90% on some photos. In general, use JPEG to save space. Use other file formats if you have applications that require them.

Note If your version of the FotoMan camera doesn't support JPEG, JPEG doesn't appear as an option in the Save Photos dialog box. If JPEG isn't available with your camera, the TIFF file format is the next best option for conserving space.

If you store many camera loads on your hard disk, you might run short of disk space. You may prefer to save most of your photos to a library of floppy disks. In any case, you can use the Save Photos dialog box to review the photos you already have on disk, compare them with the photos in the camera, and make space by deleting the files you reject.

Also, if you find you're saving photos with the names of files you already have, you need a quick way to check and change filenames.

Use the following procedure to conserve disk space as you save photos:

1. **Drag the Save Photos dialog box out of the way, if necessary.** If the Save Photos dialog box covers the FotoMan Window preview of the photo you're working on, drag the dialog box to one side. To drag the box, position the mouse cursor on the title bar, press and hold down the left mouse button, then move the mouse. For easy comparison, position the Preview area near the photo.
2. **Choose the drive and directory of the files on disk that you want to inspect.** Do this by double-clicking in the Drives and Directories areas.
3. **Specify the file format that you want to inspect.** Click the arrow in the File Format list box. This pulls down a menu of formats. Click the format you want to browse. All files of this type will be listed in the Files area. The extension of the filename you choose will be displayed in File View. You can use DOS wildcard characters to extend your search. See your DOS manual for an explanation of wildcard characters and their use.

4. **Inspect a preview of an existing file.** If a file is a gray-scale TIFF file, saved with FotoTouch or FotoMan software, you can see a preview of it in the Preview area by clicking its name.

   Note Only the TIFF file format currently makes small previews available with photo files. Therefore, you can only apply the preview-comparing strategy of Step 4 to TIFF files.

5. **Select a file you want to delete.** When you decide to delete a photo, click its filename in the Files area. Then click the Delete button. This dialog box appears.

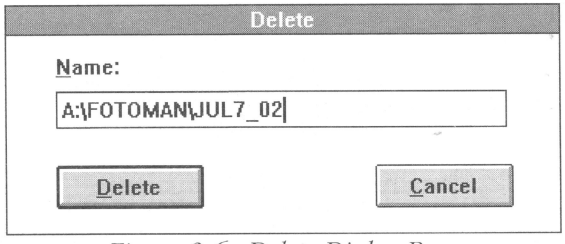


Figure 3-6. Delete Dialog Box

6. **To delete the file, click the Delete button.** You cannot delete more than one file at a time. For your protection, FotoMan does not allow you to use DOS wildcard characters to delete multiple files.

7. **Use the Directories area in the Save Photos dialog box (see Figure 3-5) to check for identical filenames.** If you save two or more camera loads on the same day, FotoMan will give the same default filenames to each new batch. If there are identical filenames, FotoMan will stop copying to ask if you want to overwrite the old file. To avoid losing your old files, you must give new photos a new set of filenames, or save to a different directory.

8. **Choose a drive and directory for saving new photos.** Make your choice in the Drives and the Directories list boxes. What you choose will be reverse highlighted.

How Many Photos Did You Take?

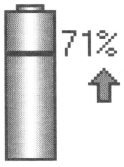
When the camera is connected to your computer, you can tell at a glance how many photos are in the camera by referring to the number following the word Photos in the FotoMan window.

The first number shows how many photos are actually in the camera. This number is always followed by "of 32." For example, a full 32-picture camera load would be indicated by Photos: 32 of 32.

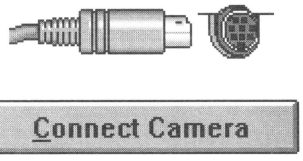
When you are away from your computer, the camera emits sound signals that tell you when you within six photos of a full camera. Refer to "Camera Sound Signals" in Chapter 2.

How Much Charge Is in the Batteries?

The battery charge icon you see here appears in the control panel of the FotoMan window. It shows the level of charge as a horizontal line on the icon. The number on the right of the icon gives the approximate percentage of total charge in the batteries. As long as the camera and computer are connected, FotoMan periodically updates this percentage, as the charge changes in the batteries. The arrow under the number points up if the batteries were charging at the last report, down if they were discharging.



If the camera is not connected to the computer, in place of the battery charge icon you see the "disconnect" icon and Connect Camera button shown here.



Taking a Timed Photo

You can use FotoMan to take a timed photo. That is, you can tell your computer to give the camera the signal to take a picture, after a time interval that you set precisely. One use for this procedure is to take a photo with yourself in it. The computer triggers the camera, so they have to stay connected until the picture is taken.

To take a timed photo, click the Camera button in the control panel of the FotoMan window. The Camera dialog box appears (see Figure 3-7). Use the upper, Timed Photo area.

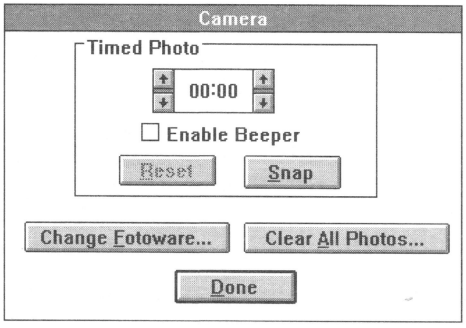


Figure 3-7. Camera Dialog Box

The right-hand arrows set the seconds of time delay until the camera snaps the photo, the left-hand arrows set the minutes. The up arrows increase the time, the down arrows decrease it. The time delay changes in five-second intervals, or one-minute intervals.

After you set the time, start the photo-taking process by clicking the Snap button. The timer counts down the seconds and minutes in reverse order. When you click Snap, its name changes to Stop. Click Stop if you want to stop the countdown at any point. This also returns the timer to the original setting. When you click Snap again, the timer starts at your original setting. Click the Reset button to stop the photo-taking process and start over with the timer at a 00:00 setting.

If you click the Enable Beeper box, the beeper in your computer (if it has one) starts beeping when the timer reaches five seconds.

Note You can use the stand in place of a tripod to hold the camera for timed shots.
If you use a tripod, be careful not to screw it too tightly to the camera and base. This could drive the camera and base so tightly together that they are very hard to separate afterward.

Clearing All Photos from the Camera

When you've saved all your photos and you want to empty the camera completely for the next picture-taking session, click the Camera button in the control panel of the FotoMan window.

You will see the Camera dialog box (refer to Figure 3-7) on your display.

To clear the camera, click the Clear All Photos button. The following confirmation dialog box appears on your monitor screen.

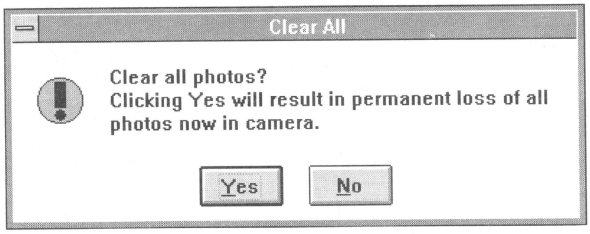


Figure 3-8. Clear All Dialog Box

If you've saved all the photos you want, click Yes to clear the camera.

CAUTION **Once you clear the camera, there is no way to bring back any of the photos you've eliminated.**

Replacing FotoWare

Software called FotoWare, which is installed inside the camera, controls FotoMan's picture-taking functions. For details, refer to the "FotoWare Software" section of Appendix A. If some accident corrupts FotoWare, FotoMan detects this the next time you connect the camera to your computer, and asks your permission to reinstall a properly functioning FotoWare file.

If you upgrade to a new version of FotoMan software, the installation program prompts you to replace your old FotoWare with the upgrade version. To do this, open the Camera dialog box (see Figure 3-7) and click the Change FotoWare button.

The following dialog box appears.

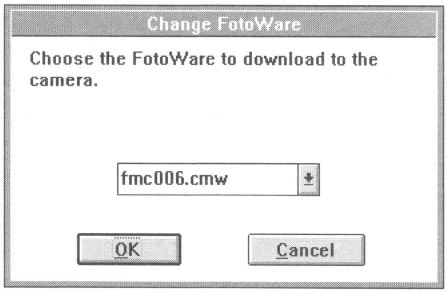


Figure 3-9. Change FotoWare Dialog Box

Click the arrow to pull down a list of FotoWare files. If you already have an older version of FotoMan software, you will see two files listed. Consult the READMEFM.TXT file in your FotoMan software package to find which one to choose.

When You Need Help

FotoMan software has an extensive on-line Help system. Click the Help button in the control panel of the FotoMan window to launch the FotoMan Help window. An index of available Help topics appears in the Help window. Click a topic to select it. You can also get help in some FotoMan dialog boxes by clicking the Help button in the dialog box.

To find out how to use Help commands and menus, consult your *Microsoft Windows User's Guide*. It is helpful to know the following Help window conventions:

Jump topic. Jump topic text appears in green, underlined with a solid line. Click one of these topics with the hand-shaped cursor to display it.

Glossary term. Glossary term text appears in green, underlined with a dotted line. Point the hand-shaped cursor at one of these topics and press and hold the mouse button to display an explanation of the term.

Exiting FotoMan

To exit FotoMan, click the Done button in the control panel of the FotoMan window. Or choose the Close command from the Windows system control-menu box in the upper left-hand corner of the window. Or press Alt + F4. For an explanation of the Windows control menu, see the *Microsoft Windows User's Guide*

4

Imaging Tips

This chapter helps you overcome a few common problems you may run into on the way to becoming an expert in getting the best photos from your FotoMan Plus Digital Camera.

Making Dark Photos Lighter

If your photos are consistently too dark, adjust the ExposureCorrection= entry in your WIN.INI file. For how to do this, refer to the ExposureCorrection= section of Appendix D.

An individual photo that turns out too dark, even too dark to distinguish much detail, can be improved dramatically by several editing options available to you in FotoTouch.

Launch FotoMan from FotoTouch (see "To Launch FotoMan from FotoTouch" in Chapter 3). Then double-click the preview in the FotoMan preview gallery to transfer it to FotoTouch. Choose the Equalize command from the FotoTouch Image menu. There is a short wait while Equalization takes place.

You may see a dramatic improvement of clearness and distinctness in the photo. But if you don't like the results, just choose the Undo Equalize command from the Edit menu.

Figure 4-1 shows a dark photo and the same photo after it was edited with the Equalize function of FotoTouch.

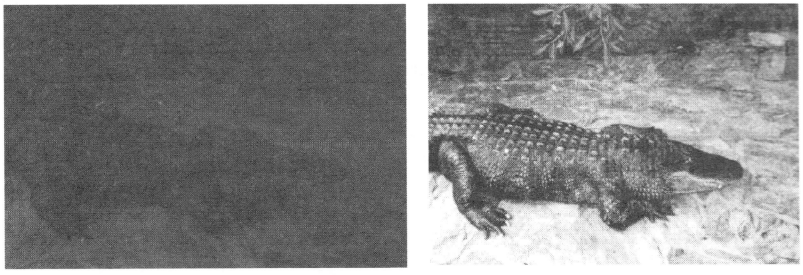


Figure 4-1. Dark Photo ... Equalized

Other commands in the FotoTouch Image menu, the FotoTouch Tone Controls, and the FotoTouch Gray Palette can greatly improve many photos that seem too dark to be usable.

Strongly Backlit Images

When you photograph something or someone—for instance, a face or a head and shoulders—with strong light coming from behind, the bright background light can make the face or head too dark to recognize.

The information in the dark areas can often be rescued and made much clearer to the eye by adjusting the Tone Controls in FotoTouch. See your *FotoTouch User's Guide* for details on how to use the Tone Controls.

Making Your Photo Printouts Look Better

If you use a high-resolution monitor and a 300-dpi (dots per inch) laser or inkjet printer, you may notice that photos look better on your display than in your printouts. Unfortunately, at 300 dpi, a printer can't fully reproduce the quality of images that the FotoMan camera creates.

On your display screen, a black and white image is made up of very small picture elements called pixels. Each pixel can be one of 256 different shades of gray. You can view all 256 gray shades if your monitor and video board subsystem support 256 true gray levels.

A typical laser printer, on the other hand, doesn't use shades of gray, it uses small dots of black ink. We see these dots as shades of gray, depending on how big and how close together the dots are, and how they're grouped. In this way, one color, black, is used to print an image that looks like it's made up of many gray shades. However, your eye can see a clear difference in quality between gray-scale images on your monitor display and printouts made of black dots at 300 dpi.

You can greatly improve photo printouts by using a laser printer with a high resolution (measured in dots per inch, or dpi), for instance the Hewlett-Packard Laser Jet 4® or another 600 dpi printer. For the highest image quality, have a local publishing service bureau print your photos on an image setter such as the Linotronic® L300, which has a much higher resolution and a much higher screen frequency than your printer.

More Information on How to Take Good Photos

The books in the following lists show you how to take better pictures. You can find these texts wherever photography books are sold.

Books in the first list contain basic how-to information:

- *Mastering Composition and Light. The Kodak Library of Creative Photography.* Chicago: Time-Life Books, 1983.
- Garrett, John. *The Art of Black and White Photography.* New York: Amphoto, 1990.
- Peterson, Bryan. *Learning to See Creatively: How to Compose Great Photographs.* New York: Amphoto, 1988.
- Silverman, David and DiSante, Theodore. *How to Compose Better Photos.* Tucson: HP Books, 1981.
- Upton, Barbara and Upton, John. *Photography.* Boston, Little, Brown and Company.

The following books are more advanced or more detailed:

- Adams, Ansel. *The New Ansel Adams Photography Series.* (Books 1, 2, and 3) Boston: New York Graphic Society, 1980.
- Freeman, Michael. *Image: Designing Effective Pictures.* New York: Amphoto, 1988.

- Birnbaum, Hubert and Butler, Owen. *The Kodak Workshop Series: Advanced Black-and-White Photography*. Rochester: Eastman Kodak Company, 1985.

- Grill, Tom and Scanlon, Mark. *Photographic Composition: Guidelines for Total Image Control Through Effective Design*. New York: Amphoto, 1990.

5

Saving Photos in DOS With FotoSave™

This chapter shows you how to use FotoSave, a DOS utility, to save photos using a laptop computer in the field. FotoSave also cuts down on the time you spend saving large numbers of FotoMan photos using Windows on a PC. FotoSave works best directly in DOS, not in DOS run from Windows or from a shell.

Also read this chapter to learn FotoSave features that enable you to:

- Move FotoSave to another directory, after installing.
- Choose a filename for your photos.
- Clear all photos from the camera.
- Change photo files you save with FOTOSAVE to the TIFF file format.
- Download FotoWare into the camera.
- Set the baud rate and the COM port.
- Get information about the camera and its state.
- Get help if you're uncertain about any operation.

The FOTOSAVE command

Before you execute the FOTOSAVE command, be sure the camera is connected to the battery charger and your computer. Serial ports can be COM1 through COM4. COM1 is the default. If you want to change the default to another serial port, read "Setting the Serial Port" on page 43.

Remember where you locate FOTOSAVE.EXE. You must either give the FOTOSAVE command from the directory where it's located, type its path (for example, C:\TOUCH) in the FOTOSAVE command, or include its path in the PATH statement in your AUTOEXEC.BAT file.

To give the FotoSave command, at the DOS prompt, type:

FOTOSAVE
add the photo filename prefix (see "Choosing a Filename" on page 42) and press the Enter key.

You can add a path statement before the prefix to specify a drive and directory for storage. If you don't name a path, FotoSave saves to the

directory from which you give the command. Press the Enter key. You see these messages on your monitor screen:

Establishing connection with camera. Please wait...

The charger is on. (or off)

** Starting to save photos. Press ESC to abort. **

Saving photo to directory: C:\TOUCH (for example)

Saving: PHOTO_01.JPG, PHOTO_02.JPG... (etc. to the last photo)

To stop saving before a load of photos is completed, press the ESC key.

Note You can only give one FotoSave parameter in each command. If you give two or more, FotoSave only acts on the first one.

Moving FotoSave to Another Directory or Computer

If you don't want to keep FotoSave in the directory or computer where it was installed with the FotoMan and FotoTouch files, copy the file FOTOSAVE.EXE to the directory of your choice.

To make sure that all FotoSave features work completely, copy the FotoWare software file (the file or files with the extension .CMW) to the same directory. FOTOSAVE.DAT is a small data file that FOTOSAVE.EXE creates in the same directory. Copy this file only if you want to keep its baud rate and port settings.

FotoSave Features

Choosing a Filename

The FotoSave utility gives a filename to every photo it saves. You supply a prefix of one to five characters. FotoSave starts every photo filename in a series with this prefix, adding a number from _01 to _32.

All photos saved by FotoSave are in the JPEG compressed file format, and filenames end in the .JPG extension. (If you use FotoMan software with a previous version of the FotoMan camera, FotoSave saves in the TIFF file format, and filenames end in the .TIF extension). To find out how to

convert JPEG files to TIFF files, read "Changing JPEG Files to TIFF Files with DECMPRSS" on page 46.

For example, if you choose the prefix PHOTO, FotoSave names the files PHOTO_01.JPG, PHOTO_02.JPG and so on, up to the maximum for the FotoMan Plus camera, PHOTO_32.JPG.

If you want to start saving with a photo other than the first one, type the new photo number into the filename. To start with the fifth photo, for instance, type:

FOTOSAVE PHOTO_05 and press the Enter key.

Setting the Serial Port

You can choose serial ports COM1 through COM4 for communication between camera and computer. The serial port parameters are /P1 for COM1 (or p1—you can type FotoSave parameters as capitals or lower case letters), /P2 for COM2, /P3 for COM3, /P4 for COM4. The only valid numbers are 1 through 4.

For example, to choose serial port COM2, type at the DOS prompt:

FOTOSAVE /P2 and press the Enter key.

This message appears on your monitor screen:

Serial port changed to P2 (COM2)

Setting the Baud Rate

You can choose baud rates of 9600, 19200, 38400, 57600, or 115200. The baud rate parameters are /B1 for 9600, /B2 for 19200, /B3 for 38400, /B4 for 57600, /B5 for 115200. The only valid numbers are 1 through 5.

For example, to set the baud rate at 38400, type at the DOS prompt:

FOTOSAVE /B3 and press the Enter key.

This message appears on your monitor screen:

BAUD rate changed to B3 (38400 BAUD)

If saving a photo at the highest baud rate (115200) takes longer than 40 seconds, you can usually shorten the time by lowering the baud rate.

Clearing the Camera of Photos

The Clear Camera parameter is /C. To remove all photos from the FotoMan Plus camera, type at the DOS prompt:

FOTOSAVE /C and press the Enter key.

This message appears on your monitor screen:

Are you sure you want to clear all photos?
Pressing 'Y' results in permanent loss of all photos now in camera.

Press 'Y' or 'y' to clear the camera. Pressing 'N' or any other character sends you back to the DOS prompt without clearing the camera.

CAUTION **After you clear the camera, there is no way to bring back any photos.**

Downloading FotoWare Software to the Camera

FotoMan maintains software in the camera, called FotoWare, to control the way it takes and stores pictures. If you choose to install Fotoware from FotoSave, or to upgrade or repair it by reinstalling from FotoSave, make sure the file with the extension .CMW is in the FotoSave directory.

The FotoWare parameter is /D. To download FotoWare to the camera, type at the DOS prompt:

FOTOSAVE /D and press the Enter key

This message appears on your monitor screen:

Installing Fotoware. Please wait... done

Getting Information about the Camera and Photos

You can immediately find out important information about the status of the camera, including how many photos you've taken. The status parameter is /S.

For information about the camera and photos, type at the DOS prompt:

FOTOSAVE /S and press the Enter key.

The following information appears on your monitor screen:

The FOTOSAVE software version number
Copyright dates
The FotoWare software version number
How many photos are in the camera
Whether the battery charger is connected or not
The battery charge level
The serial port assigned to the camera
The baud rate

Getting Help

The Help parameter is ?. Note that you don't type this parameter with a slash, '/'.

To get a complete listing of FotoSave parameters with explanations of their meaning and use, type at the DOS prompt:

FOTOSAVE ? and press the Enter key.

DOS Errorlevel for Batch Files

FotoSave returns a 0 if no error is detected, and 1 or greater for an error. This number can be used in a batch file to stop processing if an error occurs. You can only save to a directory that already exists. A sample batch file is as follows:

```
FOTOSAVE /s
if errorlevel 1 goto :END
FOTOSAVE c:\fotos\%1
:END
```

Changing JPEG Files to TIFF Files with DECMPRSS

FOTOSAVE saves photos from the FotoMan Plus camera only in the JPEG compressed file format. Many applications don't yet recognize JPEG, but do use TIFF files. Logitech's FOTOSAVE software includes DECMPRSS, a DOS utility that converts JPEG photos to the TIFF format.

To display the complete command syntax on your monitor screen, from the DOS prompt, type DECMPRSS or type DECMPRSS /? and press the Enter key.

To decompress a single photo file, type the DECMPRSS command, then the name of the old (.JPG) file, and the path, if necessary. Then add the name of the new (.TIF) file, if you want it to have a different filename. Include the path if you want to send it to another drive or directory. For example, the command

```
DECMPRSS PHOTO_15
```

decompresses the file PHOTO_15.JPG and names it PHOTO_15.TIF. The command:

```
DECMPRSS A:PHOTO_15.JPG C:\12JAN93\PIX15
```

decompresses the file PHOTO_15.JPG on floppy drive A:, names it PIX15.TIF and saves it to the directory 12JAN93 on drive C:

Add a /D parameter at the end to delete the old file. For example,

```
DECMPRSS PHOTO_15 /D
```

decompresses the old file PHOTO_15.JPG, saves it as the new file PHOTO_15.TIF, and deletes the old (.JPG) file.

You can use DOS wildcard characters with DECMPRSS. For example,

```
DECMPRSS *.*
```

decompresses all JPEG files in the current directory, and converts them to TIFF files.

A

System Requirements & Specifications

Computer System

This section defines the computer software and the hardware you need to operate the FotoMan Plus Digital Camera and its software.

Required

Computer. 100% IBM-compatible personal computer with a 286 processor or higher.

Operating System. Microsoft Windows version 3.0 or 3.1 running in standard or enhanced mode. MS-DOS or PC-DOS 3.1 or later.

Memory. At least 2 Mb (megabytes) of RAM (random access memory).

Drives. A hard disk with at least 1 Mb of free disk space after software installation (This does not include space needed by Windows, or storage space for images).
At least one 5 1/4 inch (1.2 Mb) or 3 1/2 inch floppy disk drive.

Display Adapter. EGA, VGA, Super VGA or Hercules.
VGA or higher required for gray-scale display.

Port. One open serial port (COM1, COM2, COM3, or COM4).

Strongly Recommended

Computer. IBM-compatible personal computer with a 386 processor.

Memory. 4 Mb RAM.

Drives. A hard disk with 3 Mb or more of free disk space remaining after launching Windows.

Pointing Device. A Logitech or other Windows-compatible pointing device. The pointing device must have its own port.

Display Adapter. Super VGA, High-color or True-color video boards.

Printer. For quality printouts, HP LaserJet 4 or another 600 dpi printer. Or an image setter such as Linotronic L300.

FotoMan Plus Camera Technical Specifications

This section gives you information you need to know about the FotoMan Plus camera, its parts, FotoMan and FotoWare software, and how they operate.

Dimensions. 16.8 centimeters (6.7 inches) X 8.1 cm (3.2 in) X 3 cm (1.2 in).

Weight. 284 grams (10 ounces).

Image Quality. 256 gray levels. 496 X 360 pixels.

Equivalent Resolution in Dots Per Inch. 120 dpi, for a photo approximately 4 in (12.7 cm) wide X 3 in (8.9 cm) high.

Lens. Fixed focus, 8.5 millimeters (mm) focal length, f/4.5.
35 mm camera equivalent focal length: 64 mm.
Shooting range 3 feet (1 meter) to infinity.

Equivalent Film Sensitivity. Approximately ASA 200 without the neutral density filter. Approximately ASA 25 with the filter.

Electronic Shutter Speed. 40 milliseconds (~^{1}/30 sec) with the flash. 0.5 to 50 msec (^{1}/2000 to ^{1}/20 sec) without the flash.

Flash. Guide number equivalent: 27 at ASA200. Shooting range 3 ft (1 m) to 8 ft (2.5 m).

Life of Flash. 10,000 flashes.

Image Capacity of Camera. 32 pictures.

Image Storage Medium. Solid state (DRAM) memory, battery back up.

Image Sensor Type. CCD (charge-couple device).

Image Size. Raw image size 179 Kb (8 bits per pixel). Compressed image size varies with image. Average is 23 Kb (8:1 compression).

Image Compression Method. JPEG.

Adapter Ring Size. Small end 27 mm, threaded outer diameter. Large end 37 mm, threaded inner diameter.

Camera cable Length. 6 ft. (2 m) serial cable

Serial Interface. RS423 (+/- 5v version of RS232).

Baud Rate. 9.6K baud receive. 9.6K, 19.2K, 38.4K, 57.6K, 115K baud transmit.

Main Power Source. Two rechargeable Nickel-Cadmium batteries, AA size, 600 milliamperes (mA), 1.2V.

Time Needed to Charge the NiCad Batteries. 6 hours minimum.

To Estimate Loss of Charge in the NiCad Batteries. At room temperature, the batteries lose about 20% of a full charge every time you take one full load of photos (32 photos). The batteries lose about 15% of a full charge every time you go 24 hours without recharging.

CAUTION: You cannot recover any photos from the camera after battery power is lost completely.

How Long You Can Use the NiCad Batteries Before They Wear Out. 2 years is typical. You know the NiCad batteries are wearing out when you charge them for 6 hours or more and they do less work and last a shorter time before you have to recharge them.

WARNING: Do not open the camera yourself. Danger of electrical shock. 300 volts.

Battery Charger. Output 12 V (volts) DC +4, - 2 V, 500 mAh minimum. Polarity—positive pole at center.

Memory Power Source. 3 V lithium cell.

Life of the Lithium Battery. 5 years is typical.

Operating Temperature and Humidity. 0° to 40° Centigrade (32° to 104° Fahrenheit), at 95% humidity or less.

Storage Temperature and Humidity. -40° to 50° Centigrade (-40° to 122° Fahrenheit), at 95% humidity or less.

FotoMan Software

JPEG Compression. FotoMan supports JPEG compression and the JFIF file format.

Saving the Artist and Caption Fields. Information in the Artist and Caption fields of FotoMan's Photo Info dialog box are saved to TIFF files, and only if you save from FotoMan. If you transfer the photo to FotoTouch and save from FotoTouch, Artist and Caption are lost. If you save the photo in FotoMan first, then work on the photo in FotoTouch and save again from FotoTouch, Artist and Caption are not lost. The Artist field can only be read by applications that read the TIFF 5.0 file format.

TWAIN compatibility. Logitech and others in the computer industry have cooperated to make your computer's task of acquiring images a simple and standard procedure across applications. This standard is known as TWAIN. FotoMan is a TWAIN Image Source recognized by TWAIN-aware applications such as FotoTouch image editing software.

FotoWare Software in the Camera

The software file that has a .CMW extension is called FotoWare. It is installed inside the camera in two RAM chips and controls the way the camera takes pictures and stores them until you transfer them to the computer.

The memory where FotoWare is stored has its own lithium battery to maintain it. FotoWare is not affected by the camera's NiCad batteries, which supply the power to take pictures. Normally, you lose your old FotoWare only when you upgrade to a new version or replace the lithium battery (which has a life of five years or more).

You bought your FotoMan Plus camera with FotoWare already installed. However, if FotoWare doesn't function properly, FotoMan will detect this the next time you attach the camera to your computer, and ask your permission to reinstall it.

B

Product Support Plan

Logitech backs its products with an automated fax service, customer service, electronic bulletin board services, and technical support. Count on Logitech to give you the best.

If you need product support for your Logitech product, we recommend that you read this appendix first, so you'll know how and where to get it.

The following sections describe Logitech's product support services.

Logitech FaxBack Service

FaxBack™ is a toll-free, automated fax response service available only in the U.S., Canada and Mexico. Using your touch-tone telephone and a fax machine, you can request documents that contain information about commonly-asked questions, product upgrade policies, and promotional materials. FaxBack sends documents to your fax machine in minutes.

First, call FaxBack and order the Logitech FaxBack Catalog that lists the latest available product support documents. To reach FaxBack in Mexico, Canada and the U.S.A., call:
1 (800) 245-0000.

Product Support Hotlines

Logitech Product Support hotlines connect you to a Customer Service or Technical Support Representative. This section describes what you should do before you call, describes the difference between Customer Service and Technical Support, and includes the product support hotline addresses and telephone numbers.

You can also write for product support. Address your letter to the appropriate Logitech address. See "Product Support Numbers and Addresses" in this appendix. Include your product's name and write: "Attention Customer Service" or "Technical Support." Also include your daytime phone number, your time zone and the best time to reach you.

Before You Call, Fax or Write for Product Support:

Before you call, fax or write for product support, do the following:

- **Register your Logitech product.** Registering your product entitles you to product warranty coverage, special offers and promotions, new upgrade programs, notification of future Logitech products and services, and free product support.
- **Have your numbers ready.** Provide your product serial and version number. When you call Technical Support, tell us what kind of computer you have, the amount of RAM installed, and the names of any expansion boards, peripherals, and memory-resident programs.

Should You Call Customer Service or Technical Support?

This section tells you who to contact for product support.

Customer Service. Contact Customer Service for *non-technical* product support, such as product pricing, product replacement, upgrade and update information, product warranty, and order status.

Technical Support. Contact Technical Support for *technical* product support, to deal with software or hardware questions. Before calling, faxing or writing for technical support, we recommend that you:

1. **Read the manual first.** This *FotoMan Plus User's Guide* describes how to use your camera. In particular, read the Troubleshooting section, Appendix C. Also read the READMEFM.TXT information file and any other on-line documentation.
2. **Try to identify the problem's source.** If you discover a problem, write down the sequence of events that led to it. If the problem is a new one, did you do something you've never done before? If you repeat your actions, does the problem reoccur? Are you having the problem with other products, or just this one?

Product Support Addresses and Phone Numbers

U.S.A. and Canada

Logitech Inc.
6505 Kaiser Drive
Fremont, CA 94555
Product Support Hotline:
(510) 795-8100
Fax (510) 505-0978

Switzerland

Logitech Suisse
CH-1122 Romanel/Morges
Switzerland
Product Support Hotline:
++41 (0) 21-869-98-51

Europe, Africa, & Middle East

Logitech S.A.
CH-1122 Romanel/Morges
Switzerland
Product Support Hotline:
++41 (0) 21-869-98-55

United Kingdom

LOGI (UK) Ltd.
Hawes Hill Court, Drift Road
UK-Windsor Berkshire SL44QQ
Product Support Hotline:
++44 (0) 344-89-14-52
Fax ++44 (0) 344-89-11-51

Germany

LOGI GmbH
Landsbergerstrasse 398/2
D-8000 Munich 60
Product Support Hotline:
++49 (0) 89-580-81-27

Spain

Logitech S.A.
Aragone 28
5ª planta
SP-08015 Barcelona
Product Support Hotline:
++34 (3) 426-11-13

France

Logitech France S.a.r.l.
Eragny Parc
11, Rue Rosa Luxembourg
Parc d'affaires des Bellevues
F-95610 Eragny sur Oise
Product Support Hotline:
++33 (16) 1-34-48-90-50

Italy

Logitech Italia S.r.l.
Centro Dir. Colleoni
Palazzo Andromeda Ingresso 3
I-20041 Agrate Brianza, MI
Product Support Hotline:
++39 (0) 39-605-77-80

Netherlands

Logitech Benelux
P.O. Box 1506
3601 BM Maarssen
Netherlands
Product Support Hotline:
++ 31 (0) 3465-63251

Scandinavia

Logitech A.B.
Sjöängsvägen 15
S-191 72 Sollentuna
Sweden
Product Support Hotline:
++46 (0) 8-754-92-75

Far East

Logitech Far East Ltd.
2 Creation R & D Road 4
Science-Based Industrial Park
Hsinchi, Taiwan R.O.C.
Product Support Hotline:
++886 (0) 2-746-6601

Logitech Bulletin Board Services

If you have a modem, you can communicate with Logitech Product Support on the following electronic bulletin boards.

LBBS (Logitech Bulletin Board Service)

With a 300, 1200 or 2400 baud modem, call LBBS 24 hours a day, 7 days a week. Set the communication parameters on your modem to either: 7 bits, 1 stop bit, and even parity; or 8 bits, 1 stop bit, and no parity.

In the United States, call:**1 (510) 795-0408**

In the U.K., call: **++44 (0) 344-89-14-90**

In Europe, call: **++41 (0) 21-869-98-17**

CompuServe

If you are a member of CompuServe Information Service, you can get the latest Logitech Product Support information.

From the CompuServe system prompt, type: **GO LOGITECH**

C

Troubleshooting

This appendix helps you with some problems you might have when operating the FotoMan Plus Digital Camera and software:

- The first section explains how to use a serial port to establish communications between the camera and your computer.
- The second section discusses system interrupt conflicts and lists problems that they might cause.
- The third section tells what to do when certain error messages appear on your monitor screen.

Serial Port (COM Port)

A serial port, or COM port, may be built into your computer, or it may be a board installed in an expansion slot of your computer. An unused serial port is required for the FotoMan Plus camera.

Your computer must have at least one free COM port available for the FotoMan Plus camera. Your computer may have serial ports, but if you run a mouse or a modem, you may not have a serial port free.

Some computers may have only one COM port, which is often already used. To connect the FotoMan Plus camera in this situation, you must disconnect the mouse or other device and plug the camera cable into the COM port *before starting Windows and installing FotoMan software.* Then use keyboard commands instead of the mouse to operate FotoMan software. The FotoMan on-line Help utility has a complete list of FotoMan keyboard commands.

Be sure you are using the correct COM port. Press the Options button in your FotoMan window and check the COM port setting in the dialog box. Then check at the back of your computer to ensure that the camera cable is plugged into the correct COM port.

Interrupt Conflicts (IRQ Conflicts)

Usually, when you add a board or a peripheral device to your computer, it has to use one of the system interrupts available on the PC. As a result, more than one board or device on your computer may be trying to use the same interrupt. This situation is known as an interrupt conflict, or IRQ conflict.

If your system locks up (stops operating) either occasionally or consistently, or gives you error messages indicating that the camera and your computer are communicating sporadically, or not at all, your system may have an interrupt conflict.

If you've added a serial board to supply a COM port for the FotoMan Plus camera, be aware that most manufacturers, by default, use IRQ 4 for COM 1 or COM 3 and IRQ 3 for COM 2 or COM 4. Make sure that no other device on your system uses the IRQ assigned to the COM port where you connect the FotoMan Plus camera. For example, if FotoMan uses COM2 (IRQ 3), make sure no other device is set to IRQ 3.

Obtain IRQ information about all the boards and peripheral devices on your system. Check the manufacturer's manual or information sheet to find out which interrupts they use. Many peripheral devices may default to use IRQ 3 or IRQ 4, including mice, bus mouse cards, network cards, scanner cards, fax cards, internal modems, sound cards and tape backup units. FotoMan cannot share an interrupt with any of these.

Windows 3.1 allows you to change the IRQ settings of a COM port easily. Use this procedure:

1. **Open the Windows Control Panel and double-click the Ports icon.** The Ports dialog box appears.
2. **Select the COM port whose setting you want to change.**
3. **Click the Settings button.** A Settings dialog box appears for the COM port you selected.
4. **Click the Advanced button.** An Advanced Settings dialog box appears.
5. **Select the IRQ number you want.** Open the Interrupt Request Line list box and highlight the IRQ number.
6. **Click OK.**

Remember that you have to change the interrupt setting *on the card* to match the Windows setting. Consult the documentation for your serial card on how to make these changes.

If you have persistent problems when you connect the camera to your computer, but don't feel qualified to change settings inside your computer, consult the manuals of any boards you have added, or call the manufacturer.

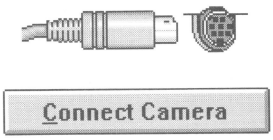
Error Messages

Some messages you may encounter in the normal use of FotoMan software are described in this section. For information about other error messages posted by FotoMan, refer to the FotoMan on-line HELP utility.

Error Message

Plug in camera and wait for reconnection...

This error message appears in the message line of the FotoMan window (for the location of the message line see Figure 3-2), when FotoMan software senses that the camera is off-line. The "disconnect" icon to the right is shown in the FotoMan window in place of the battery icon.



Solution

Connect the camera to your computer and click the "connect camera" button under the icon. FotoMan will re-establish the connection after several seconds.

If this message remains on the screen after you've made sure the camera is connected and you've waited a few minutes, one of the following conditions may be at fault:

- The camera is not seated well in the base, or the camera cable is not firmly plugged in. Check the contacts between camera and base, and the cable connections. Then click the Connect Camera button beneath the "disconnected" icon and re-launch FotoMan software.
- You have connected your camera to the wrong serial port. Press the Options button in the FotoMan window, note the COM port number chosen, and check that you have used that port in the back of your computer.
- The serial port you chose is not working or is configured wrong. Choose another serial port.

- You have taken a picture by pressing the camera trigger while the camera was connected to the computer. In this case, just wait a short while and the message will go away.
- The rechargeable NiCad batteries in the camera are completely drained. When you start charging the batteries, check whether the red light in the base is glowing or flashing. If it isn't, the battery charger isn't making contact. Charge the camera batteries at least 30 minutes, then re-launch FotoMan software.
- The lithium battery that supports the in-camera software is dead and needs replacing.

Error Messages

Time out, camera is not responding
Serial transmission error.

These messages appear in dialog boxes.

Solution

If one of these messages appears, it means that, although the computer and camera have established a connection, they're having trouble communicating. Check the connections between camera and computer and press the Retry button in the dialog box to continue.

If these messages appear regularly, the reason may be among the following conditions:

- FotoMan software may be trying to communicate with the camera at a transmission rate (or baud rate) which is too fast. Try lowering the baud rate. For more information, refer to the FotoMan on-line Help utility.
- You may be running low on memory. Close any other open programs before pressing the Retry button.

If you get other messages indicating that FotoMan has insufficient memory to complete an operation, close down other applications before proceeding.

Insufficient memory messages may also be caused by a shortage of available space on your hard disk. FotoMan software swaps information to disk during normal operations. Keep as much hard disk memory free for FotoMan to use as possible. Keep three to five megabytes free, if possible.

Other Error Messages

For other error messages, see the FotoMan on-line Help utility. To load Help, click the Help button in the FotoMan window.

D

WIN.INI Entries

This appendix lists the sections that are added to your Windows WIN.INI file during installation of FotoMan software.

[LogitechFotoMan]

FotoMan+SoftwareDir=

This points to the location of FotoMan Plus version of camera software on the hard drive.

FotoManSoftwareDir=

This points to the location of FotoMan camera software on the hard drive.

GammaCorrection=

Default value is 0. This parameter is reserved for future implementation.

ExposureCorrection=

This adjusts the overall brightness of your pictures. The default value is 0. If your pictures tend to be too dark, try raising this number. We recommend a value of 8. the range is from 0 to 99.

TotalNumberOfPhotos=

This tells the software the total number of pictures the camera holds. Do not change this number.

BaudRate=

Choose or keep the default value (0) to enable the computer to determine the optimum baud rate automatically. If you get transmission error messages on your display while communicating with the camera, you can try to ensure more stable communications by lowering the baud rate. Enter the desired baud rate in this field. Valid values are 9600, 19200, 38400, 57600. To find the current baud rate, choose the About command in the control-menu box (the small square with a horizontal line through it in the upper left-hand corner of your FotoMan window).

ComPort=

The COM port is the communications port the camera is connected to. Valid values are 1 through 4. If you set this entry to 0, the software will rerun Setup whenever you launch FotoMan.

Artist=

This is the artist name that is recorded as default on photos made with your camera. It is stored only with TIFF files.

Caption=

This is the caption that is recorded as default on photos made with your camera. It is stored only with TIFF files.

[TWAIN]
DefaultDataSource=

This points to the last data source opened by the TWAIN manager.

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FotoMan Replacement Parts Order Form

You may order replacement parts for your FotoMan or FotoMan Plus camera listed on this page directly from Logitech. Allow 4-6 weeks for delivery. Please submit to the following address:

Logitech, Inc.
Attn: Customer Service
6505 Kaiser Drive
Fremont, CA 94555

Description	Part Number	Price	Qty	Total
9-pin to 25-pin Adapter (PC only)	500161-01	$10.00	____	$_____
Adapter Ring	000237-00	$10.00	____	$_____
Lens Cap	000461-00	$2.50	____	$_____
Neutral Density Filter	000268-00	$10.00	____	$_____
*Battery Charger	900011-00	$20.00	____	$_____
*Camera Base	861002-00	$20.00	____	$_____
*Camera Stand with Support Plate	430150-01	$10.00	____	$_____
*Camera-to-Computer Cable	500290-01	$10.00	____	$_____
PC Kit (Multiple Platforms or Mac-to-PC Conversion) Contains items starred (*) above, plus FotoTouch Image Editing Software		$99.00	____	$_____
Mac Kit (Multiple Platforms or PC-to-Mac Conversion) Contains items starred (*) above, plus Digital Darkroom Software		$99.00	____	$_____
			Subtotal	$_____
			CA/MA Sales Tax	$_____
			Shipping/Handling (US $6, Canada $8)	$_____
			Total	$_____

Please print your name and return address clearly:

Name:_____

Company:_____

Address:_____

City:_____State:_____Zip:_____

Country:_____Phone:(____)_____

Method of Payment (US)

Check Money Order

Visa MasterCard

Card Number_____

Expiration Date_____/_____

Authorized Signature_____

Wide-angle lenses, telephoto lenses, filters and other camera accessories:
For pricing and ordering information in the U.S.A., call this number: 1-800-522-7835.

LOGITECH FOTOMAN™ PLUS

DIGITAL CAMERA FOR COMPUTERS

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